Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research B 227 (2005) 619–626
NIM B
Beam Interactions with Materials & Atoms
www.elsevier.com/locate/nimb

Author index

Abdul-Redah, T., see Vos, M. . . . 227 (2005) 233
Added, N., see Barradas, N.P. . . . 227 (2005) 397
Afanasiev, S.V., A.D. Kovalenko, V.N. Kuznetsov, S.V. Romanov, Sh.Z. Saifulin, A.M. Taratin, V.I. Volkov, M.A. Voevodin and V.V. Boiko, Modified method for registration of particle deflection by a bent crystal . . . 227 (2005) 16
Akkerman, A., J. Barak and D. Emfietzoglou, Ion and electron track-structure and its effects in silicon: model and calculations . . . 227 (2005) 319
Aleinik, A.N., see Naumenko, G.A. . . . 227 (2005) 70
Ali, S., see Alimuddin, . . . 227 (2005) 603
Alimuddin and S. Ali, On the design and fabrication of a high precision Mossbauer servo-system . . . 227 (2005) 603
Alonso, G. and R.T. Perry, On the relationship between changes in k and changes in homogenized 2-group constants . . . 227 (2005) 369
Amano, S., see Ohsawa, D. . . . 227 (2005) 431
Andersen, H.H. and Y.L. Pivovarov, Editorial . . . 227 (2005) 1
Andersen, H.H., L.E. Rehn and C. Trautmann, NIM-B Editorial for 2005 . . . 227 (2005) 231
Araki, S., see Karataev, P. . . . 227 (2005) 158
Araki, S., see Karataev, P. . . . 227 (2005) 198
Arnoldbik, W.M., see Barradas, N.P. . . . 227 (2005) 397
Aryshev, A., see Potylitsyn, A. . . . 227 (2005) 170
Aryshev, A., B. Kalinin, G. Naumenko, A. Potylitsyn, R. Bardai, B. Ishkhanov and V. Shvedunov, Experimental investigation of coherent Smith–Purcell radiation from a "flat" grating . . . 227 (2005) 175
Aryshev, A.S., see Naumenko, G.A. . . . 227 (2005) 70
Astabatyan, R.A., see Skobelev, N.K. . . . 227 (2005) 471
Atalla, C., see Roumié, M. . . . 227 (2005) 584
Atanasov, P.A., see Imamova, S.E. . . . 227 (2005) 490
Avakian, R.O., L.A. Gevorgian, K.A. Ispirian and A.H. Shamamian, Radiation of particles in undulators with straight sections taking into account the medium polarization . . . 227 (2005) 104
Avila, M.J., see Morales, J.R. . . . 227 (2005) 385

Babot, D., see Freud, N. . . . 227 (2005) 551
Barak, J., see Akkerman, A. . . . 227 (2005) 319
Bardai, R., see Aryshev, A. . . . 227 (2005) 175
Barradas, N.P., N. Added, W.M. Arnoldbik, I. Bogdanović-Radović, W. Bohne, S. Cardoso, C. Danner, N. Dytlewski, P.P. Freitas, M. Jakšić, C. Jeynes, C. Krug, W.N. Lennard, S. Lindner, Ch. Linsmeier, Z. Medunić, P. Pelicon, R.P. Pezzi, C. Radtke, J. Röhrich, T. Sajavaara, T.D.M. Salgado, F.C. Stedile, M.H. Tabacniks and I. Vickridge, A round robin characterisation of the thickness and composition of thin to ultra-thin AlNO films . . . 227 (2005) 397
Bazhin, A.I., see Kornich, G.V. . . . 227 (2005) 261
Berger, P., see Imamova, S.E. . . . 227 (2005) 490
Betz, G., see Kornich, G.V. . . . 227 (2005) 261
Bilski, P., see Zhydachevskii, Ya. . . . 227 (2005) 545
Block, R.C., see Sones, B. . . . 227 (2005) 22
Blondiaux, G., see Stroosnijder, M.F. . . . 227 (2005) 597
Bogdanović-Radović, I., see Barradas, N.P. . . . 227 (2005) 397
Bohne, W., see Barradas, N.P. . . . 227 (2005) 397
Boiko, V.V., see Afanasiev, S.V. . . . 227 (2005) 16

doi:10.1016/S0168-583X(04)01244-3

Bolotovskii, B.M. and A.V. Serov, Transition radiation as a source of circularly polarized radiation 227 (2005) 78
Bolton, P., see Potylitsyn, A. 227 (2005) 170
Bordovitsyn, V.A., V.G. Bulenok and T.O. Pozdeeva, On the coherence of synchrotron radiation 227 (2005) 143
Brown, I.G., see Sangyuenyongpipat, S. 227 (2005) 289
Budak, G., see Karabulut, A. 227 (2005) 485
Budnar, M., see Pelicon, P. 227 (2005) 591
Bulenok, V.G., see Bordovitsyn, V.A. 227 (2005) 143

Čadež, I., see Pelicon, P. 227 (2005) 591
Cambon, S., see Rivaton, A. 227 (2005) 343
Cambon, S., see Rivaton, A. 227 (2005) 357
Cancino, S.A., see Morales, J.R. 227 (2005) 385
Cardoso, S., see Barradas, N.P. 227 (2005) 397
Chateigner, D., see Miro, S. 227 (2005) 306
Chatzidimitriou-Dreismann, C.A., see Vos, M. 227 (2005) 233
Chehab, R., see Satoh, M. 227 (2005) 3
Chen, D., see Wang, L. 227 (2005) 282
Chen, F., see Wang, K.-M. 227 (2005) 271
Cheng, J. and F.B. Prinz, Damage in yttria-stabilized zirconia by Xe irradiation measured by X-ray diffraction 227 (2005) 577
Chesta, M.A., see Morales, J.R. 227 (2005) 385
Cline, D., see Potylitsyn, A. 227 (2005) 170
Costantini, J.-M., see Miro, S. 227 (2005) 306

Danner, C., see Barradas, N.P. 227 (2005) 397
Danon, Y., see Sones, B. 227 (2005) 22
Das, A.K., see Nersisyan, H.B. 227 (2005) 455
Dausinger, F., see Imamova, S.E. 227 (2005) 490
Dinator, M.I., see Morales, J.R. 227 (2005) 385
Durygin, A., see Zhydachevskii, Ya. 227 (2005) 545
Dytlewski, N., see Barradas, N.P. 227 (2005) 397

Emfietzoglou, D., see Akkerman, A. 227 (2005) 319
Enkelmann, E., R. Jonckheere and L. Ratschbacher, The effects of radiation damage accumulation and annealing on fission-track dating of titanite 227 (2005) 567
Ertuğrul, M., see Karabulut, A. 227 (2005) 485

Faupel, F., see Kornich, G.V. 227 (2005) 261
Fedorov, V.V., E.G. Lapin, E. Lelievre-Berna, V.V. Nesvizhevsky, A.K. Petoukhov, S.Yu. Semenikhin, T. Soldner, F. Tasset and V.V. Voronin, The Laue diffraction method to search for a neutron EDM. Experimental test of the sensitivity 227 (2005) 11
Fernandez, F., see Mouhssine, D. 227 (2005) 609
Freitas, P.P., see Barradas, N.P. 227 (2005) 397
Freud, N., J.-M. Létang and D. Babot, A hybrid approach to simulate multiple photon scattering in X-ray imaging 227 (2005) 551
Fruchey, K.S., see Perumal, A.N. 227 (2005) 251
Fu, Y.Q., see Wang, Z.G. 227 (2005) 337
Fukui, Y., see Potylitsyn, A. 227 (2005) 170
Furukawa, K., see Satoh, M. 227 (2005) 3

Gardette, J.-L., see Rivaton, A. 227 (2005) 343
Gardette, J.-L., see Rivaton, A. 227 (2005) 357
Gärtner, K., Modified master equation approach of axial dechanneling in perfect compound crystals 227 (2005) 522

Gary, C., V. Kaplin, A. Kubankin, N. Nasonov, M. Piestrup and S. Uglov, An investigation of the Cherenkov X-rays from relativistic electrons ... 227 (2005) 95
Gary, C.K., see Nasonov, N.N. ... 227 (2005) 41
Gary, C.K., see Nasonov, N.N. ... 227 (2005) 216
Geng, K.W., see Gu, Y. ... 227 (2005) 275
Gevorgian, L.A., see Avakian, R.O. ... 227 (2005) 104
Grebille, D., see Miro, S. ... 227 (2005) 306
Grishin, V.K., Polarization radiation from relativistic electrons in matter containing fullcrenes ... 227 (2005) 82
Grob, J.-J., see Miro, S. ... 227 (2005) 306
Gu, Y., F. Zeng, K.W. Geng, G.H. Yang and F. Pan, Incident angle effects on microstructure and magnetic properties of Fe–Nb thin films using IBAD ... 227 (2005) 275
Gürol, A., see Karabulut, A. ... 227 (2005) 485

Hamatsu, R., see Satoh, M. ... 227 (2005) 3
Hamatsu, R., see Karataev, P. ... 227 (2005) 158
Hamatsu, R., see Potylitsyn, A. ... 227 (2005) 170
Hamatsu, R., see Karataev, P. ... 227 (2005) 198
Hara, J., see Satoh, M. ... 227 (2005) 3
Hashimoto, Y., see Ohsawa, D. ... 227 (2005) 431
Hayakawa, K., see Hayakawa, Y. ... 227 (2005) 32
Hayakawa, Y., I. Sato, K. Hayakawa and T. Tanaka, Simulations to the project of a PXR based X-ray source composed of an electron linac and a double-crystal system ... 227 (2005) 32
Hayano, H., see Karataev, P. ... 227 (2005) 158
Hayano, H., see Karataev, P. ... 227 (2005) 198
Higashi, A., see Ohsawa, D. ... 227 (2005) 431
Hirabayashi, M., see Ohsawa, D. ... 227 (2005) 431
Hoffmann, M., see Stroosnijder, M.F. ... 227 (2005) 597
Hole, D.E., see Khanlary, M. ... 227 (2005) 379
Honma, T., see Ohsawa, D. ... 227 (2005) 431
Horvat, V., see Perumal, A.N. ... 227 (2005) 251
Hu, H., see Wang, K.-M. ... 227 (2005) 271

Imamova, S.E., P.A. Atanasov, N.N. Nedialkov, F. Dausinger and P. Berger, Molecular dynamics simulation using pair and many body interatomic potentials: ultrashort laser ablation of Fe ... 227 (2005) 490
Ishkhanov, B., see Aryshev, A. ... 227 (2005) 175
Ispirian, K.A., see Avakian, R.O. ... 227 (2005) 104

Jakšić, M., see Barradas, N.P. ... 227 (2005) 397
Jeynes, C., see Barradas, N.P. ... 227 (2005) 397
Jiang, W., V. Shutthanandan, S. Thevuthasan, D.E. McCready and W.J. Weber, Erratum to: "Carbon analysis using energetic ion beams" [Nucl. Instr. and Meth. B 222 (2005) 538–546] ... 227 (2005) 450
Jonckheere, R., see Enkelmann, E. ... 227 (2005) 567
Joseph, B., S. Mohapatra, B. Satpati, H.P. Lenka, P.K. Kuiri and D.P. Mahapatra, Low energy O induced redistribution of nanosized Au inclusions in an oxide layer grown on Si(1 0 0) ... 227 (2005) 559

Kalinin, B., see Aryshev, A. ... 227 (2005) 175
Kalinin, B.N., see Naumenko, G.A. ... 227 (2005) 70
Kalpakchieva, R., see Skobelev, N.K. ... 227 (2005) 471
Kamitani, T., see Satoh, M. ... 227 (2005) 3
Kaplin, V., see Gary, C. ... 227 (2005) 95
Kaplin, V.V., see Nasonov, N.N. ... 227 (2005) 41
Kaplin, V.V., see Nasonov, N.N. ... 227 (2005) 216

Karabulut, A., A. Gürol, G. Budak and M. Ertuğrul, K shell and L subshell and L shell photoeffect cross-sections in the atomic region $40 \leqslant Z \leqslant 52$ and $58 \leqslant Z \leqslant 68$ at 59.537 keV 227 (2005) 485
Karataev, P., S. Araki, R. Hamatsu, H. Hayano, T. Muto, G. Naumenko, A. Potylitsyn, N. Terunuma and J. Urakawa, Observation of optical diffraction radiation from a slit target at KEK accelerator test facility 227 (2005) 158
Karataev, P., see Potylitsyn, A. 227 (2005) 170
Karataev, P., S. Araki, R. Hamatsu, H. Hayano, T. Muto, G. Naumenko, A. Potylitsyn, N. Terunuma and J. Urakawa, Diffraction radiation from a charged particle moving through a rectangular hole in a rectangular screen 227 (2005) 198
Kawauchi, H., see Ohsawa, D. 227 (2005) 431
Khanlary, M., D.E. Hole and P.D. Townsend, Ion beam luminescence of Nd:YAG 227 (2005) 379
Kokhanenko, A.P., see Voitsekhovskii, A.V. 227 (2005) 531
Kolchuzhkin, A., A. Potylitsyn and S. Strokov, Energy loss of electrons passing through a laser flash in a storage ring 227 (2005) 209
Kornich, G.V., G. Betz, V. Zaporojtchenko, A.I. Bazhin and F. Faupel, Molecular dynamics simulations of low energy ion sputtering of copper nano-dimensional clusters on graphite substrates 227 (2005) 261
Kothiyal, G.P., see Tomar, B.S. 227 (2005) 391
Kotkin, G.L. and V.G. Serbo, Beam-size effect and particle losses at B-factories KEKB and PEP-II 227 (2005) 137
Kovalenko, A.D., see Afanasiev, S.V. 227 (2005) 16
Krasilnikov, V., N. Nasonov and P. Zhukova, Relative contribution of real and virtual photon diffraction to the parametric X-ray yield 227 (2005) 55
Krug, C., see Barradas, N.P. 227 (2005) 397
Kubankin, A., see Gary, C. 227 (2005) 95
Kubankin, A.S., see Nasonov, N.N. 227 (2005) 216
Kube, G., Calculation of Smith–Purcell radiation from a volume strip grating 227 (2005) 180
Kuiri, P.K., see Joseph, B. 227 (2005) 559
Kulko, A.A., see Skobelev, N.K. 227 (2005) 471
Kumar, S., see Tomar, B.S. 227 (2005) 391
Kuznetsov, V.N., see Afanasiev, S.V. 227 (2005) 16

Lapin, E.G., see Fedorov, V.V. 227 (2005) 11
Lelievre-Berna, E., see Fedorov, V.V. 227 (2005) 11
Lenka, H.P., see Joseph, B. 227 (2005) 559
Lennard, W.N., see Barradas, N.P. 227 (2005) 397
Lêtang, J.-M., see Freud, N. 227 (2005) 551
Liljequist, D., Elastic particle transport in non-crystalline matter – a comparison of trajectories and diffraction 227 (2005) 499
Lindner, S., see Barradas, N.P. 227 (2005) 397
Linsmeier, Ch., see Barradas, N.P. 227 (2005) 397
Lobastov, S.P., see Skobelev, N.K. 227 (2005) 471
Lu, Q.-M., see Wang, K.-M. 227 (2005) 271
Lukyanov, S.M., see Skobelev, N.K. 227 (2005) 471

Ma, C.-Q., see Wang, K.-M. 227 (2005) 271
Mahapatra, D.P., see Joseph, B. 227 (2005) 559
Markaryan, E.R., see Skobelev, N.K. 227 (2005) 471
Markelj, S., see Pelicon, P. 227 (2005) 591
Maslov, V.A., see Skobelev, N.K. 227 (2005) 471
Matkovskii, A., see Zhydachevskii, Ya. 227 (2005) 545
Mayers, J., see Vos, M. 227 (2005) 233
McCready, D.E., see Jiang, W. 227 (2005) 450
Medunić, Z., see Barradas, N.P. 227 (2005) 397
Mendenhall, M.H. and R.A. Weller, An algorithm for computing screened Coulomb scattering in GEANT4 ..... 227 (2005) 420
Miranda, P.A., see Morales, J.R. 227 (2005) 385
Miro, S., D. Grebille, D. Chateigner, D. Pelloquin, J.-P. Stoquert, J.-J. Grob, J.-M. Costantini and F. Studer, X-ray diffraction study of damage induced by swift heavy ion irradiation in fluorapatite 227 (2005) 306
Mohapatra, S., see Joseph, B. 227 (2005) 559

Monteiro, O.R., see Sangyuenyongpipat, S. 227 (2005) 289
Morales, J.R., M.A. Chesta, S.A. Cancino, P.A. Miranda, M.I. Dinator and M.J. Avila, Application of PIXE in the determination of the production cross section of a radionuclide decaying by electron capture .. 227 (2005) 385
Mouhssine, D., A. Nourreddine, A. Nachab, A. Pape and F. Fernandez, A new environmental dosimeter with imaging plates for the fast neutron monitoring 227 (2005) 609
Muto, T., see Karataev, P. 227 (2005) 158
Muto, T., see Potylitsyn, A. 227 (2005) 170
Muto, T., see Karataev, P. 227 (2005) 198

Nachab, A., see Mouhssine, D. 227 (2005) 609
Nakamura, N., K. Noda and Y. Yamauchi, Nano-structure and tribological properties of B^+ and Ti^+ co-implanted silicon nitride 227 (2005) 299
Nasonov, N., see Krasilnikov, V. 227 (2005) 55
Nasonov, N., see Gary, C. 227 (2005) 95
Nasonov, N., G. Pokhil and P. Zhukova, Peculiarities in the spectrum of coherent emission from relativistic electrons crossing a thin aligned crystal 227 (2005) 110
Nasonov, N.N., V.V. Kaplin, S.R. Uglov, V.N. Zabaev, M.A. Piestrup and C.K. Gary, X-rays from relativistic electrons crossing a multilayer nanostructure 227 (2005) 41
Nasonov, N.N., A.S. Kubankin, V.V. Kaplin, S.R. Uglov, M.A. Piestrup and C.K. Gary, X-ray generation from relativistic electrons passing through thin targets in cyclical accelerators 227 (2005) 216
Naumenko, G., see Karataev, P. 227 (2005) 158
Naumenko, G., see Potylitsyn, A. 227 (2005) 170
Naumenko, G., see Aryshev, A. 227 (2005) 175
Naumenko, G., see Karataev, P. 227 (2005) 198
Naumenko, G.A., A.N. Aleinik, A.S. Aryshev, B.N. Kalinin, A.P. Potylitsyn, G.A. Saruev and A.F. Sharafutdinov, Coherent transition and diffraction radiation from a bunched 6.1 MeV electron beam . 227 (2005) 70
Naumenko, G.A., Some features of diffraction and transition radiation at the distance less than $\gamma^2\lambda$ 227 (2005) 87
Nedialkov, N.N., see Imamova, S.E. 227 (2005) 490
Nersisyan, H.B. and A.K. Das, Proton and antiproton energy losses in a solid target: an exact trial potential approach 227 (2005) 455
Nesvizhevsky, V.V., see Fedorov, V.V. 227 (2005) 11
Noda, K., see Nakamura, N. 227 (2005) 299
Nourreddine, A., see Mouhssine, D. 227 (2005) 609
Nsouli, B., see Roumié, M. 227 (2005) 584

Ogletree, D.F., see Sangyuenyongpipat, S. 227 (2005) 289
Ohsawa, D., H. Kawauchi, M. Hirabayashi, Y. Okada, T. Honma, A. Higashi, S. Amano, Y. Hashimoto, F. Soga and Y. Sato, An apparatus for measuring the energy and angular distribution of secondary electrons emitted from water vapor by fast heavy-ion impact 227 (2005) 431
Okada, Y., see Ohsawa, D. 227 (2005) 431
Okuno, H., see Satoh, M. 227 (2005) 3

Pan, F., see Gu, Y. 227 (2005) 275
Pape, A., see Mouhssine, D. 227 (2005) 609
Paul, H. and A. Schinner, Judging the reliability of stopping power tables and programs for protons and alpha particles using statistical methods 227 (2005) 461
Pelicon, P., see Barradas, N.P. 227 (2005) 397
Pelicon, P., A. Razpet, S. Markelj, I. Čadež and M. Budnar, Elastic recoil detection analysis of hydrogen with ^{7}Li ions using a polyimide foil as a thick hydrogen reference 227 (2005) 591
Pelloquin, D., see Miro, S. 227 (2005) 306
Peng, Y., see Perumal, A.N. 227 (2005) 251
Penionzhkevich, Yu.E., see Skobelev, N.K. 227 (2005) 471
Perry, R.T., see Alonso, G. 227 (2005) 369

Perumal, A.N., V. Horvat, R.L. Watson, Y. Peng and K.S. Fruchey, Cross sections for charge change in argon and equilibrium charge states of 3.5 MeV/amu uranium ions passing through argon and carbon targets ... 227 (2005) 251
Petoukhov, A.K., see Fedorov, V.V. ... 227 (2005) 11
Pezzi, R.P., see Barradas, N.P. ... 227 (2005) 397
Piestrup, M., see Gary, C. ... 227 (2005) 95
Piestrup, M.A., see Nasonov, N.N. ... 227 (2005) 41
Piestrup, M.A., see Nasonov, N.N. ... 227 (2005) 216
Pivovarov, Y.L., see Andersen, H.H. ... 227 (2005) 1
Pokhil, G., see Nasonov, N. ... 227 (2005) 110
Possnert, G., see Zhang, Y. ... 227 (2005) 479
Potylitsyn, A., see Karataev, P. ... 227 (2005) 158
Potylitsyn, A., G. Naumenko, A. Aryshev, Y. Fukui, D. Cline, F. Zhou, M. Ross, P. Bolton, J. Urakawa, T. Muto, M. Tobiyama, R. Hamatsu and P. Karataev, Coherent radiation recoil effect for the optical diffraction radiation beam size monitor at SLAC FFTB ... 227 (2005) 170
Potylitsyn, A., see Aryshev, A. ... 227 (2005) 175
Potylitsyn, A., see Karataev, P. ... 227 (2005) 198
Potylitsyn, A., see Kolchuzhkin, A. ... 227 (2005) 209
Potylitsyn, A.P., see Satoh, M. ... 227 (2005) 3
Potylitsyn, A.P., see Tishchenko, A.A. ... 227 (2005) 63
Potylitsyn, A.P., see Naumenko, G.A. ... 227 (2005) 70
Potylitsyn, A.P., Coherent diffraction radiation interferometry and short bunch length measurements ... 227 (2005) 191
Pozdeeva, T.O., see Bordovitsyn, V.A. ... 227 (2005) 143
Prinz, F.B., see Cheng, J. ... 227 (2005) 577

Radtke, C., see Barradas, N.P. ... 227 (2005) 397
Ratera, I., see Sangyuenyongpipat, S. ... 227 (2005) 289
Ratschbacher, L., see Enkelmann, E. ... 227 (2005) 567
Razpet, A., see Zhang, Y. ... 227 (2005) 479
Razpet, A., see Pelicon, P. ... 227 (2005) 591
Rehn, L.E., see Andersen, H.H. ... 227 (2005) 231
Rivaton, A., S. Cambon and J.-L. Gardette, Radiochemical ageing of EPDM elastomers. 2. Identification and quantification of chemical changes in EPDM and EPR films γ-irradiated under oxygen atmosphere ... 227 (2005) 343
Rivaton, A., S. Cambon and J.-L. Gardette, Radiochemical ageing of EPDM elastomers. 3. Mechanism of radiooxidation ... 227 (2005) 357
Röhrich, J., see Barradas, N.P. ... 227 (2005) 397
Romanov, S.V., see Afanasiev, S.V. ... 227 (2005) 16
Ross, M., see Potylitsyn, A. ... 227 (2005) 170
Roumié, M., B. Nsouli, C. Atalla and S.Y. Waksman, Application of PIXE using Al funny filter for cluster analysis of Byzantine amphorae from Beirut ... 227 (2005) 584

Saifulin, Sh.Z., see Afanasiev, S.V. ... 227 (2005) 16
Sajavaara, T., see Barradas, N.P. ... 227 (2005) 397
Salgado, T.D.M., see Barradas, N.P. ... 227 (2005) 397
Sangyuenyongpipat, S., T. Vilaithong, L.D. Yu, A. Verdaguer, I. Ratera, D.F. Ogletree, O.R. Monteiro and I.G. Brown, Metal ion bombardment of onion skin cell wall ... 227 (2005) 289
Saruev, G.A., see Naumenko, G.A. ... 227 (2005) 70
Sato, I., see Hayakawa, Y. ... 227 (2005) 32
Sato, Y., see Ohsawa, D. ... 227 (2005) 431
Satoh, M., T. Suwada, K. Furukawa, T. Kamitani, T. Sugimura, K. Yoshida, H. Okuno, K. Umemori, R. Hamatsu, J. Hara, A.P. Potylitsyn, I.E. Vnukov and R. Chehab, Experimental study of positron production from silicon and diamond crystals by 8-GeV channeling electrons ... 227 (2005) 3
Satpati, B., see Joseph, B. ... 227 (2005) 559
Sauvage, T., see Stroosnijder, M.F. ... 227 (2005) 597
Schinner, A., see Paul, H. ... 227 (2005) 461

Semenikhin, S.Yu., see Fedorov, V.V. ... 227 (2005) 11
Serbo, V.G., Coherent bremsstrahlung as a new possibility to monitor collisions of beams at colliders ... 227 (2005) 132
Serbo, V.G., see Kotkin, G.L. ... 227 (2005) 137
Serov, A.V., see Bolotovskii, B.M. ... 227 (2005) 78
Shamamian, A.H., see Avakian, R.O. ... 227 (2005) 104
Sharafutdinov, A.F., see Naumenko, G.A. ... 227 (2005) 70
Shen, D.-Y., see Wang, K.-M. ... 227 (2005) 271
Shi, B.-R., see Wang, K.-M. ... 227 (2005) 271
Shrikhande, V.K., see Tomar, B.S. ... 227 (2005) 391
Shul'ga, N.F. and V.V. Syshchenko, Simulation of incoherent bremsstrahlung of high energy electrons and positrons in a crystal ... 227 (2005) 125
Shul'ga, N.F. and D.N. Tyutyunnik, On the radiation by relativistic electrons in thin layers of matter and their collision with short bunches of relativistic particles ... 227 (2005) 152
Shulga, S.A., see Voitsekhovskii, A.V. ... 227 (2005) 531
Shutthanandan, V., see Jiang, W. ... 227 (2005) 450
Shvedunov, V., see Aryshev, A. ... 227 (2005) 175
Skobelev, N.K., R. Kalpakchieva, R.A. Astabatyan, J. Vincour, A.A. Kulko, S.P. Lobastov, S.M. Lukyanov, E.R. Markaryan, V.A. Maslov, Yu.E. Penionzhkevich, Yu.G. Sobolev and V.Yu. Ugryumov, Exit charge-state distributions of 242.8 MeV and 264.5 MeV ^{48}Ca ions incident on carbon and gold foils ... 227 (2005) 471
Smith, R., see Voitsekhovskii, A.V. ... 227 (2005) 531
Sobolev, Yu.G., see Skobelev, N.K. ... 227 (2005) 471
Soga, F., see Ohsawa, D. ... 227 (2005) 431
Soldner, T., see Fedorov, V.V. ... 227 (2005) 11
Sones, B., Y. Danon and R.C. Block, Lithium fluoride (LiF) crystal for parametric X-ray (PXR) production ... 227 (2005) 22
Stedile, F.C., see Barradas, N.P. ... 227 (2005) 397
Stoquert, J.-P., see Miro, S. ... 227 (2005) 306
Strikhanov, M.N., see Tishchenko, A.A. ... 227 (2005) 63
Strokov, S., see Kolchuzhkin, A. ... 227 (2005) 209
Stroosnijder, M.F., M. Hoffmann, T. Sauvage, G. Blondiaux and L. Vincent, Wear evaluation of a cross-linked medical grade polyethylene by ultra thin layer activation compared to gravimetry ... 227 (2005) 597
Studer, F., see Miro, S. ... 227 (2005) 306
Suchocki, A., see Zhydachevskii, Ya. ... 227 (2005) 545
Sugak, D., see Zhydachevskii, Ya. ... 227 (2005) 545
Sugimura, T., see Satoh, M. ... 227 (2005) 3
Suwada, T., see Satoh, M. ... 227 (2005) 3
Syshchenko, V.V., see Shul'ga, N.F. ... 227 (2005) 125

Tabacniks, M.H., see Barradas, N.P. ... 227 (2005) 397
Tanaka, T., see Hayakawa, Y. ... 227 (2005) 32
Taratin, A.M., see Afanasiev, S.V. ... 227 (2005) 16
Tasset, F., see Fedorov, V.V. ... 227 (2005) 11
Terunuma, N., see Karataev, P. ... 227 (2005) 158
Terunuma, N., see Karataev, P. ... 227 (2005) 198
Thevuthasan, S., see Jiang, W. ... 227 (2005) 450
Tishchenko, A.A., M.N. Strikhanov and A.P. Potylitsyn, X-ray transition radiation from an ultrarelativistic charge passing near the edge of a target or through a thin wire ... 227 (2005) 63
Tobiyama, M., see Potylitsyn, A. ... 227 (2005) 170
Tomar, B.S., S. Kumar, V.K. Shrikhande and G.P. Kothiyal, Study of cesium diffusion in borosilicate glass by heavy ion Rutherford backscattering spectrometry ... 227 (2005) 391
Townsend, P.D., see Khanlary, M. ... 227 (2005) 379
Trautmann, C., see Andersen, H.H. ... 227 (2005) 231
Tyutyunnik, D.N., see Shul'ga, N.F. ... 227 (2005) 152

Uglov, S., see Gary, C. ... 227 (2005) 95
Uglov, S.R., see Nasonov, N.N. ... 227 (2005) 41

Uglov, S.R., see Nasonov, N.N. ... 227 (2005) 216
Ugryumov, V.Yu., see Skobelev, N.K. ... 227 (2005) 471
Umemori, K., see Satoh, M. ... 227 (2005) 3
Urakawa, J., see Karataev, P. ... 227 (2005) 158
Urakawa, J., see Potylitsyn, A. ... 227 (2005) 170
Urakawa, J., see Karataev, P. ... 227 (2005) 198

Verdaguer, A., see Sangyuenyongpipat, S. ... 227 (2005) 289
Vickridge, I., see Barradas, N.P. ... 227 (2005) 397
Vilaithong, T., see Sangyuenyongpipat, S. ... 227 (2005) 289
Vincent, L., see Stroosnijder, M.F. ... 227 (2005) 597
Vincour, J., see Skobelev, N.K. ... 227 (2005) 471
Vnukov, I.E., see Satoh, M. ... 227 (2005) 3
Voevodin, M.A., see Afanasiev, S.V. ... 227 (2005) 16
Voitsekhovskii, A.V., A.P. Kokhanenko, S.A. Shulga and R. Smith, A model for the prediction of radiation defect profiles in the semiconductor target (HgCdTe) subjected to high power short pulsed ion beams ... 227 (2005) 531
Volkov, V.I., see Afanasiev, S.V. ... 227 (2005) 16
Voronin, V.V., see Fedorov, V.V. ... 227 (2005) 11
Vos, M., C.A. Chatzidimitriou-Dreismann, T. Abdul-Redah and J. Mayers, Electron and neutron scattering from polymer films at high momentum transfer ... 227 (2005) 233

Waksman, S.Y., see Roumié, M. ... 227 (2005) 584
Wang, K.-M., F. Chen, H. Hu, X.-L. Wang, B.-R. Shi, Q.-M. Lu, C.-Q. Ma and D.-Y. Shen, Double waveguide in $NdLiP_4O_{12}$ laser crystal formed by MeV He^+ ion implantation ... 227 (2005) 271
Wang, L., Y.E. Zhao, D. Chen and S.P. Wong, Growth kinetics of stoichiometric SiC layers formed by high fluence carbon implantation into silicon using a metal vapor vacuum arc ion source ... 227 (2005) 282
Wang, L.M., see Wang, Z.G. ... 227 (2005) 337
Wang, X.-L., see Wang, K.-M. ... 227 (2005) 271
Wang, Z.G., X.T. Zu, Y.Q. Fu, S. Zhu and L.M. Wang, Electron irradiation effect on the reverse phase transformation temperatures in TiNi shape memory alloy thin films ... 227 (2005) 337
Warchol, S., see Zhydachevskii, Ya. ... 227 (2005) 545
Watson, R.L., see Perumal, A.N. ... 227 (2005) 251
Weber, W.J., see Jiang, W. ... 227 (2005) 450
Weber, W.J., see Zhang, Y. ... 227 (2005) 479
Weller, R.A., see Mendenhall, M.H. ... 227 (2005) 420
Wong, S.P., see Wang, L. ... 227 (2005) 282

Yamauchi, Y., see Nakamura, N. ... 227 (2005) 299
Yang, G.H., see Gu, Y. ... 227 (2005) 275
Yoshida, K., see Satoh, M. ... 227 (2005) 3
Yu, L.D., see Sangyuenyongpipat, S. ... 227 (2005) 289

Zabaev, V.N., see Nasonov, N.N. ... 227 (2005) 41
Zaporojtchenko, V., see Kornich, G.V. ... 227 (2005) 261
Zeng, F., see Gu, Y. ... 227 (2005) 275
Zhang, Y., W.J. Weber, A. Razpet and G. Possnert, Electronic stopping powers for He, Be and F ions in Au ... 227 (2005) 479
Zhao, Y.E., see Wang, L. ... 227 (2005) 282
Zhou, F., see Potylitsyn, A. ... 227 (2005) 170
Zhu, S., see Wang, Z.G. ... 227 (2005) 337
Zhukova, P., see Krasilnikov, V. ... 227 (2005) 55
Zhukova, P., see Nasonov, N. ... 227 (2005) 110
Zhydachevskii, Ya., A. Durygin, A. Suchocki, A. Matkovskii, D. Sugak, P. Bilski and S. Warchol, Mn-doped $YAlO_3$ crystal: a new potential TLD phosphor ... 227 (2005) 545
Zu, X.T., see Wang, Z.G. ... 227 (2005) 337

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research B 227 (2005) 627–629
NIM B
Beam Interactions with Materials & Atoms
www.elsevier.com/locate/nimb

Subject index

Editorial

Editorial, H.H. Andersen and Y.L. Pivovarov 227 (2005) 1
Editorial, H.H. Andersen, L.E. Rehn and C. Trautmann 227 (2005) 231

Basic Data for Materials Modification and Analysis

The Laue diffraction method to search for a neutron EDM. Experimental test of the sensitivity, V.V. Fedorov, E.G. Lapin, E. Lelievre-Berna, V.V. Nesvizhevsky, A.K. Petoukhov, S.Yu. Semenikhin, T. Soldner, F. Tasset and V.V. Voronin 227 (2005) 11
X-rays from relativistic electrons crossing a multilayer nanostructure, N.N. Nasonov, V.V. Kaplin, S.R. Uglov, V.N. Zabaev, M.A. Piestrup and C.K. Gary 227 (2005) 41
Relative contribution of real and virtual photon diffraction to the parametric X-ray yield, V. Krasil'nikov, N. Nasonov and P. Zhukova 227 (2005) 55
X-ray transition radiation from an ultrarelativistic charge passing near the edge of a target or through a thin wire, A.A. Tishchenko, M.N. Strikhanov and A.P. Potylitsyn 227 (2005) 63
Transition radiation as a source of circularly polarized radiation, B.M. Bolotovskii and A.V. Serov 227 (2005) 78
Polarization radiation from relativistic electrons in matter containing fullerenes, V.K. Grishin 227 (2005) 82
Some features of diffraction and transition radiation at the distance less than $\gamma^2\lambda$, G.A. Naumenko 227 (2005) 87
An investigation of the Cherenkov X-rays from relativistic electrons, C. Gary, V. Kaplin, A. Kubankin, N. Nasonov, M. Piestrup and S. Uglov 227 (2005) 95
Experimental investigation of coherent Smith–Purcell radiation from a "flat" grating, A. Aryshev, B. Kalinin, G. Naumenko, A. Potylitsyn, R. Bardai, B. Ishkhanov and V. Shvedunov 227 (2005) 175
Calculation of Smith–Purcell radiation from a volume strip grating, G. Kube 227 (2005) 180
Diffraction radiation from a charged particle moving through a rectangular hole in a rectangular screen, P. Karataev, S. Araki, R. Hamatsu, H. Hayano, T. Muto, G. Naumenko, A. Potylitsyn, N. Terunuma and J. Urakawa 227 (2005) 198
Electron and neutron scattering from polymer films at high momentum transfer, M. Vos, C.A. Chatzidimitriou-Dreismann, T. Abdul-Redah and J. Mayers 227 (2005) 233
Cross sections for charge change in argon and equilibrium charge states of 3.5 MeV/amu uranium ions passing through argon and carbon targets, A.N. Perumal, V. Horvat, R.L. Watson, Y. Peng and K.S. Fruchey 227 (2005) 251
Proton and antiproton energy losses in a solid target: an exact trial potential approach, H.B. Nersisyan and A.K. Das 227 (2005) 455
Judging the reliability of stopping power tables and programs for protons and alpha particles using statistical methods, H. Paul and A. Schinner 227 (2005) 461
Exit charge-state distributions of 242.8 MeV and 264.5 MeV ^{48}Ca ions incident on carbon and gold foils, N.K. Skobelev, R. Kalpakchieva, R.A. Astabatyan, J. Vincour, A.A. Kulko, S.P. Lobastov, S.M. Lukyanov, E.R. Markaryan, V.A. Maslov, Yu.E. Penionzhkevich, Yu.G. Sobolev and V.Yu. Ugryumov 227 (2005) 471
Electronic stopping powers for He, Be and F ions in Au, Y. Zhang, W.J. Weber, A. Razpet and G. Possnert 227 (2005) 479
K shell and L subshell and L shell photoeffect cross-sections in the atomic region $40 \leqslant Z \leqslant 52$ and $58 \leqslant Z \leqslant 68$ at 59.537 keV, A. Karabulut, A. Gürol, G. Budak and M. Ertuğrul 227 (2005) 485

Atomic Collisions in Solids

Experimental study of positron production from silicon and diamond crystals by 8-GeV channeling electrons, M. Satoh, T. Suwada, K. Furukawa, T. Kamitani, T. Sugimura, K. Yoshida, H. Okuno, K. Umemori, R. Hamatsu, J. Hara, A.P. Potylitsyn, I.E. Vnukov and R. Chehab 227 (2005) 3

doi:10.1016/S0168-583X(04)01245-5

Coherent transition and diffraction radiation from a bunched 6.1 MeV electron beam, G.A. Naumenko, A.N. Aleinik, A.S. Aryshev, B.N. Kalinin, A.P. Potylitsyn, G.A. Saruev and A.F. Sharafutdinov 227 (2005) 70
Peculiarities in the spectrum of coherent emission from relativistic electrons crossing a thin aligned crystal, N. Nasonov, G. Pokhil and P. Zhukova 227 (2005) 110
Simulation of incoherent bremsstrahlung of high energy electrons and positrons in a crystal, N.F. Shul'ga and V.V. Syshchenko 227 (2005) 125
On the radiation by relativistic electrons in thin layers of matter and their collision with short bunches of relativistic particles, N.F. Shul'ga and D.N. Tyutyunnik 227 (2005) 152
Molecular dynamics simulations of low energy ion sputtering of copper nano-dimensional clusters on graphite substrates, G.V. Kornich, G. Betz, V. Zaporojtchenko, A.I. Bazhin and F. Faupel 227 (2005) 261
Molecular dynamics simulation using pair and many body interatomic potentials: ultrashort laser ablation of Fe, S.E. Imamova, P.A. Atanasov, N.N. Nedialkov, F. Dausinger and P. Berger 227 (2005) 490
Elastic particle transport in non-crystalline matter – a comparison of trajectories and diffraction, D. Liljequist 227 (2005) 499
Modified master equation approach of axial dechanneling in perfect compound crystals, K. Gärtner 227 (2005) 522

Ion and Laser Beam Modification of Materials

Double waveguide in $NdLiP_4O_{12}$ laser crystal formed by MeV He^+ ion implantation, K.-M. Wang, F. Chen, H. Hu, X.-L. Wang, B.-R. Shi, Q.-M. Lu, C.-Q. Ma and D.-Y. Shen 227 (2005) 271
Incident angle effects on microstructure and magnetic properties of Fe–Nb thin films using IBAD, Y. Gu, F. Zeng, K.W. Geng, G.H. Yang and F. Pan 227 (2005) 275
Growth kinetics of stoichiometric SiC layers formed by high fluence carbon implantation into silicon using a metal vapor vacuum arc ion source, L. Wang, Y.E. Zhao, D. Chen and S.P. Wong 227 (2005) 282
Metal ion bombardment of onion skin cell wall, S. Sangyuenyongpipat, T. Vilaithong, L.D. Yu, A. Verdaguer, I. Ratera, D.F. Ogletree, O.R. Monteiro and I.G. Brown 227 (2005) 289
Nano-structure and tribological properties of B^+ and Ti^+ co-implanted silicon nitride, N. Nakamura, K. Noda and Y. Yamauchi 227 (2005) 299
A model for the prediction of radiation defect profiles in the semiconductor target (HgCdTe) subjected to high power short pulsed ion beams, A.V. Voitsekhovskii, A.P. Kokhanenko, S.A. Shulga and R. Smith 227 (2005) 531

Effects of Radiation

X-ray diffraction study of damage induced by swift heavy ion irradiation in fluorapatite, S. Miro, D. Grebille, D. Chateigner, D. Pelloquin, J.-P. Stoquert, J.-J. Grob, J.-M. Costantini and F. Studer 227 (2005) 306
Ion and electron track-structure and its effects in silicon: model and calculations, A. Akkerman, J. Barak and D. Emfietzoglou 227 (2005) 319
Electron irradiation effect on the reverse phase transformation temperatures in TiNi shape memory alloy thin films, Z.G. Wang, X.T. Zu, Y.Q. Fu, S. Zhu and L.M. Wang 227 (2005) 337
Radiochemical ageing of EPDM elastomers. 2. Identification and quantification of chemical changes in EPDM and EPR films γ-irradiated under oxygen atmosphere, A. Rivaton, S. Cambon and J.-L. Gardette 227 (2005) 343
Radiochemical ageing of EPDM elastomers. 3. Mechanism of radiooxidation, A. Rivaton, S. Cambon and J.-L. Gardette 227 (2005) 357
On the relationship between changes in k and changes in homogenized 2-group constants, G. Alonso and R.T. Perry 227 (2005) 369
Mn-doped $YAlO_3$ crystal: a new potential TLD phosphor, Ya. Zhydachevskii, A. Durygin, A. Suchocki, A. Matkovskii, D. Sugak, P. Bilski and S. Warchol 227 (2005) 545
A hybrid approach to simulate multiple photon scattering in X-ray imaging, N. Freud, J.-M. Létang and D. Babot 227 (2005) 551
Low energy O induced redistribution of nanosized Au inclusions in an oxide layer grown on Si(1 0 0), B. Joseph, S. Mohapatra, B. Satpati, H.P. Lenka, P.K. Kuiri and D.P. Mahapatra 227 (2005) 559
The effects of radiation damage accumulation and annealing on fission-track dating of titanite, E. Enkelmann, R. Jonckheere and L. Ratschbacher 227 (2005) 567
Damage in yttria-stabilized zirconia by Xe irradiation measured by X-ray diffraction, J. Cheng and F.B. Prinz 227 (2005) 577

Analysis of Materials

Ion beam luminescence of Nd:YAG, M. Khanlary, D.E. Hole and P.D. Townsend 227 (2005) 379
Application of PIXE in the determination of the production cross section of a radionuclide decaying by electron capture, J.R. Morales, M.A. Chesta, S.A. Cancino, P.A. Miranda, M.I. Dinator and M.J. Avila 227 (2005) 385
Study of cesium diffusion in borosilicate glass by heavy ion Rutherford backscattering spectrometry, B.S. Tomar, S. Kumar, V.K. Shrikhande and G.P. Kothiyal 227 (2005) 391
A round robin characterisation of the thickness and composition of thin to ultra-thin AlNO films, N.P. Barradas, N. Added, W.M. Arnoldbik, I. Bogdanović-Radović, W. Bohne, S. Cardoso, C. Danner, N. Dytlewski, P.P. Freitas, M. Jakšić, C. Jeynes, C. Krug, W.N. Lennard, S. Lindner, Ch. Linsmeier, Z. Medunić, P. Pelicon, R.P. Pezzi, C. Radtke, J. Röhrich, T. Sajavaara, T.D.M. Salgado, F.C. Stedile, M.H. Tabacniks and I. Vickridge 227 (2005) 397
Application of PIXE using Al funny filter for cluster analysis of Byzantine amphorae from Beirut, M. Roumié, B. Nsouli, C. Atalla and S.Y. Waksman 227 (2005) 584
Elastic recoil detection analysis of hydrogen with ^{7}Li ions using a polyimide foil as a thick hydrogen reference, P. Pelicon, A. Razpet, S. Markelj, I. Čadež and M. Budnar 227 (2005) 591
Wear evaluation of a cross-linked medical grade polyethylene by ultra thin layer activation compared to gravimetry, M.F. Stroosnijder, M. Hoffmann, T. Sauvage, G. Blondiaux and L. Vincent 227 (2005) 597

Ion Sources, Beam Optics and Accelerator Systems

Radiation of particles in undulators with straight sections taking into account the medium polarization, R.O. Avakian, L.A. Gevorgian, K.A. Ispirian and A.H. Shamamian 227 (2005) 104
Coherent bremsstrahlung as a new possibility to monitor collisions of beams at colliders, V.G. Serbo 227 (2005) 132
Beam-size effect and particle losses at B-factories KEKB and PEP-II, G.L. Kotkin and V.G. Serbo 227 (2005) 137
On the coherence of synchrotron radiation, V.A. Bordovitsyn, V.G. Bulenok and T.O. Pozdeeva 227 (2005) 143
Observation of optical diffraction radiation from a slit target at KEK accelerator test facility, P. Karataev, S. Araki, R. Hamatsu, H. Hayano, T. Muto, G. Naumenko, A. Potylitsyn, N. Terunuma and J. Urakawa 227 (2005) 158
Coherent radiation recoil effect for the optical diffraction radiation beam size monitor at SLAC FFTB, A. Potylitsyn, G. Naumenko, A. Aryshev, Y. Fukui, D. Cline, F. Zhou, M. Ross, P. Bolton, J. Urakawa, T. Muto, M. Tobiyama, R. Hamatsu and P. Karataev 227 (2005) 170
Coherent diffraction radiation interferometry and short bunch length measurements, A.P. Potylitsyn 227 (2005) 191
Energy loss of electrons passing through a laser flash in a storage ring, A. Kolchuzhkin, A. Potylitsyn and S. Strokov 227 (2005) 209
X-ray generation from relativistic electrons passing through thin targets in cyclical accelerators, N.N. Nasonov, A.S. Kubankin, V.V. Kaplin, S.R. Uglov, M.A. Piestrup and C.K. Gary 227 (2005) 216

Experimental Methods and Equipment

Modified method for registration of particle deflection by a bent crystal, S.V. Afanasiev, A.D. Kovalenko, V.N. Kuznetsov, S.V. Romanov, Sh.Z. Saifulin, A.M. Taratin, V.I. Volkov, M.A. Voevodin and V.V. Boiko 227 (2005) 16
Lithium fluoride (LiF) crystal for parametric X-ray (PXR) production, B. Sones, Y. Danon and R.C. Block 227 (2005) 22
Simulations to the project of a PXR based X-ray source composed of an electron linac and a double-crystal system, Y. Hayakawa, I. Sato, K. Hayakawa and T. Tanaka 227 (2005) 32
An algorithm for computing screened Coulomb scattering in GEANT4, M.H. Mendenhall and R.A. Weller 227 (2005) 420
An apparatus for measuring the energy and angular distribution of secondary electrons emitted from water vapor by fast heavy-ion impact, D. Ohsawa, H. Kawauchi, M. Hirabayashi, Y. Okada, T. Honma, A. Higashi, S. Amano, Y. Hashimoto, F. Soga and Y. Sato 227 (2005) 431
On the design and fabrication of a high precision Mossbauer servo-system, Alimuddin and S. Ali 227 (2005) 603
A new environmental dosimeter with imaging plates for the fast neutron monitoring, D. Mouhssine, A. Nourreddine, A. Nachab, A. Pape and F. Fernandez 227 (2005) 609

Errata

Erratum to: "Carbon analysis using energetic ion beams" [Nucl. Instr. and Meth. B 222 (2005) 538–546], W. Jiang, V. Shutthanandan, S. Thevuthasan, D.E. McCready and W.J. Weber 227 (2005) 450